

# Nylon PA12 FS3201PA-F

## Product Description

Black PA12 Nylon is a high-performance, easy-to-process material. It's cost efficient and ideal for medical orthopedics, automotive interior, and functional parts and end-use parts.

## Key Features

- Excellent impact resistance
- High toughness, cost-effective
- Low water absorption, high temperature resistance

## Physical Properties

Appearance	Black / Dark Grey
Bulk Density	0.52 g/cm <sup>3</sup>
Part Density	1.01 g/cm <sup>3</sup>

## Thermal Properties

Melting Point (10°C/min) ISO 11357-1:2020	185.5 °C
Heat Deflection Temp (HDT), 1.8 MPa ISO 78-1:2020	52 °C
Heat Deflection Temp (HDT), 0.45 MPa ISO 78-1:2020	145 °C

## Mechanical Properties

Property Description	Metric
Tensile Strength ISO 527-1:2019	42 MPa
Tensile Modulus ISO 527-1:2019	1450 MPa
Elongation at Break ISO 527-1:2018	40%
Flexural Strength ISO 178:2019	45 MPa
Flexural Modulus ISO 178:2019	1350 MPa
Impact Strength (notched Izod) ISO 180:2019	10 KJ/m <sup>2</sup>
Impact Strength (unnotched Izod) ISO 180:2019	32 KJ/m <sup>2</sup>

Note: Material performance may vary depending on application, processing conditions and end-use environment. The information in this spec sheet is provided as typical values only and is not guaranteed.